

GLOBAL CROP PRODUCTION REVIEW, 2005

Prepared by USDA's Joint Agricultural Weather Facility

The following is an annual review of regional crop production, comparing 2005 with the previous year. For both the northern and southern hemisphere, these summaries reflect growing season weather for crops that were harvested in the calendar year of 2005. For most countries, changes in production for 2005 are based on crop estimates released by the United States Department of Agriculture in February 2006.

Wheat and Coarse Grain Summary: In 2005, world wheat production declined about 2 percent from 2004. Wheat production increased in Canada, Mexico, Iran, Russia, Ukraine, Kazakhstan, China, Pakistan, South Africa, and Australia, and declined in the United States, countries in the European Union, Morocco, Algeria, Tunisia, Turkey, Brazil, and Argentina.

The country-level changes in 2005 wheat production from 2004 are shown in Figure 1. World coarse grain production was down 5 percent in 2005. Production increased in Hungary, Turkey, China, Argentina, and South Africa and declined in the United States, Canada, most of the European Union, Ukraine, Russia, Mexico, India, Brazil, and Australia.

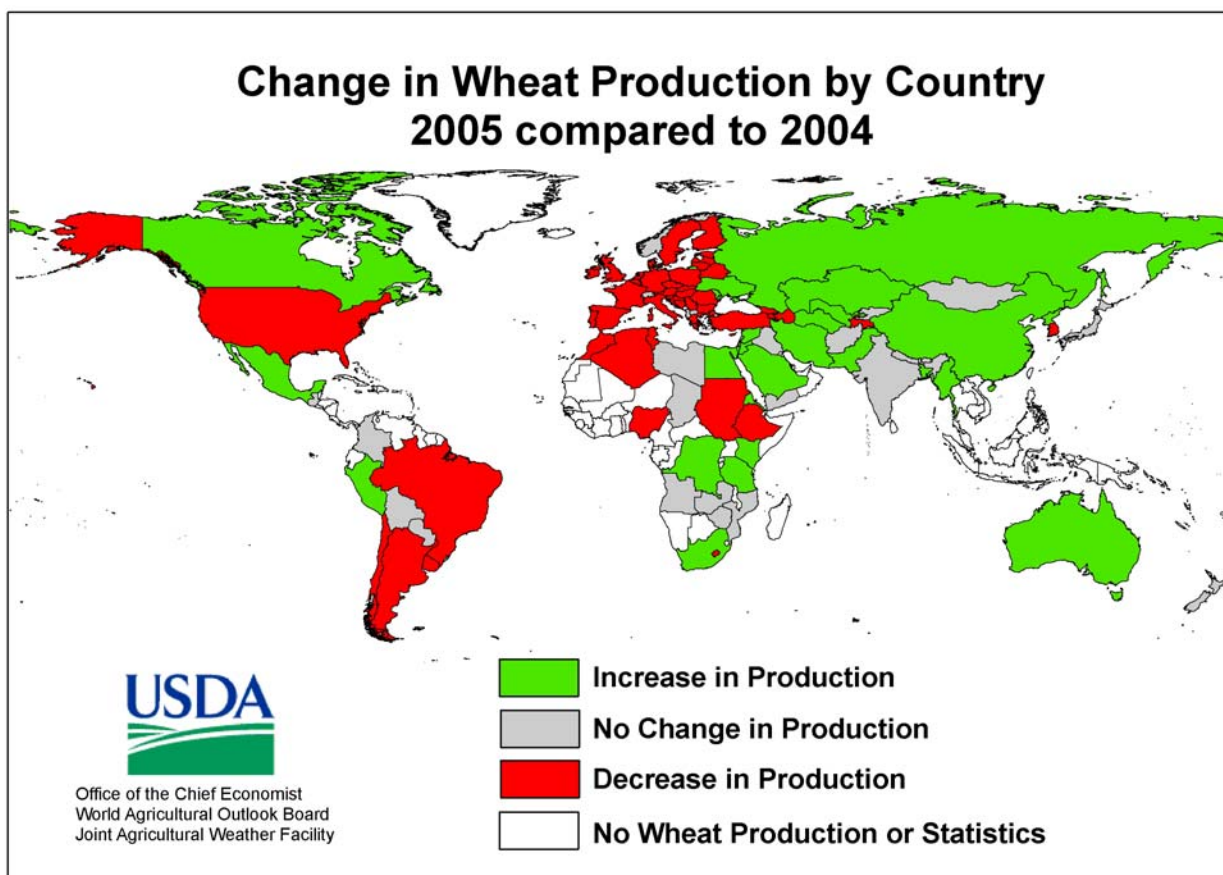


Figure 1. Country-level change in 2005 wheat production from 2004.

In the United States, wheat production (winter, spring, and durum) declined 2 percent from 2004. Production totals of Hard Red Winter and White Winter wheat were similar to the previous year, but Soft Red Winter (SRW) wheat production was down 19 percent from 2004. Excessive autumn wetness in the Delta dramatically reduced SRW planted acreage. U.S. spring wheat production was also down, coming in 11 percent below 2004. U.S. corn production was down 6 percent from the record 2004 crop. A regional drought in the central Corn Belt lowered corn production in northern Illinois and adjacent areas.

In Canada, wheat production rose 4 percent in 2005, due to generally favorable growing conditions and an improvement of long-term drought that had plagued the Prairies in previous years. Unlike 2004, the first autumn freeze arrived later than usual, allowing spring crops to mature normally. Barley production was down about 5 percent due to lower yield and reduced acreage. Corn production rose about 7 percent, with crop yield in Ontario rebounding from 2004.

The European Union (EU-25) experienced a 10 percent decline in wheat production, due to contrasting weather extremes in eastern and western Europe. In the EU-25, the countries of France, Germany, the United Kingdom, Poland, Italy, and Spain account for about 80 percent of total wheat production. In 2005, drought plagued western Europe after a favorable growing season in 2004. On the Iberian Peninsula, drought reached record proportions, significantly reducing crop yields and depleting reservoirs and irrigation supplies. In France, dryness was not as extreme, but still significant enough to lower wheat production by 7 percent. In contrast, persistent wetness in Southeastern Europe flooded fields and damaged crops. Wheat production declined in Hungary (12 percent), Bulgaria (14 percent) and Romania (9 percent), mostly due to yield reductions caused by persistent, untimely rain. In addition, there were significant harvest delays across Hungary and the Balkans due to excessive

rain from July into September, although drier weather in October allowed fieldwork to resume. Farther north, modest reductions over last year's wheat crop were reported in Germany and the United Kingdom (6 and 3 percent, respectively). In Poland, ideal winter and spring moisture was followed by an untimely spell of dry weather in late June and early July, causing an 11 percent decline in wheat production. Winterkill was confined to northwest Poland where an early-February freeze occurred in a snow-free area.

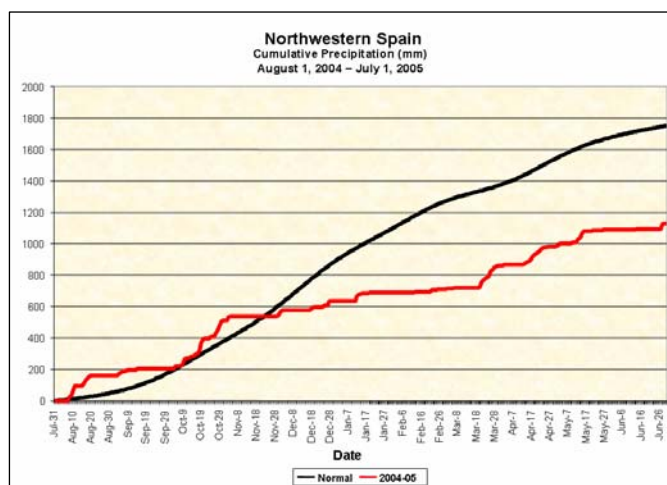


Figure 2. Cumulative precipitation for northwestern Spain.

Western drought and eastern flooding also caused European Union coarse grain production to drop 13 percent, with corn and barley production decreasing 10 and 14 percent, respectively. Below-normal summer rainfall coupled with periods of extreme heat lowered corn production in France by 19 percent. Barley production in Spain was down 59 percent in 2005, due to severe drought on the Iberian Peninsula (Figure 2). Corn production declined 10 to 25 percent from 2004 across most EU-25 countries. Corn production in France was down 19 percent. Likewise, barley production in most European Union countries decreased 6 to 10 percent from the 2004 crop, although production gains were reported in Italy (7 percent) and Denmark (6 percent).

The unseasonably wet weather across Southeastern Europe reduced the region's coarse grain

production. Corn production was down 25 percent in Romania, despite nearly identical corn acreage to 2004. Likewise, barley production decreased 21 percent, due to flooding and persistent wetness.

In Russia, winter wheat is mostly grown in the Southern District and southern areas of the Central and Volga Districts. Most of the spring wheat crop is grown from the Volga District eastward through the Siberia District. The combination of favorable growing conditions along with a 15 percent increase in planted area resulted in an 11 percent increase in winter wheat production from 2004. In the autumn of 2004, mild weather and adequate moisture in October and November favored winter wheat establishment and alleviated prior concerns about a lack of planting moisture in September. Unusually mild weather in November promoted later-than-usual growth of winter wheat in most areas. The winter wheat crop entered dormancy 1-2 weeks later than usual. Unseasonably mild weather provided favorable overwintering conditions for the winter wheat crop during most of the winter. Winterkill for winter grains was reportedly 8 percent, which is below the 10-year average of 13 percent and below the previous winter's 10 percent winterkill. In March, the coldest weather since 1996 maintained an unusually late snowpack, delaying the greening of winter wheat. In April, a warming trend melted the late-season snow cover and prompted greening in winter wheat, about 2 weeks later than usual. Adequate precipitation during key stages of crop development benefited crops in May and June, and was followed by favorable harvest weather. Regarding spring wheat, weather conditions favored timely planting in the Urals and Siberia Districts, while wet weather in the Volga District slowed early planting activities. During the remainder of the growing season, mild weather and above-normal precipitation favored crops in the Urals and western areas in Siberia, while periodic heat and dryness lowered yield prospects in key spring wheat producing areas in the eastern Volga District and eastern areas in Siberia. These declines in crop prospects were not made up in

other areas that experienced more favorable weather, resulting in a 4 percent decline in spring wheat production over the previous year. Coarse grain production in Russia declined by 7 percent in 2005, mainly due to a decline in area planted to spring barley. Spring barley is grown throughout Russia and accounts for about 50 percent of coarse grain production. More favorable weather resulted in a 26 percent increase in 2005 rye production. Although favorable weather boosted yield prospects for corn, production fell 9 percent due to an 11 percent decline in planted area.

In Ukraine, most of the wheat grown in the country consists of winter varieties. In the autumn of 2004, near- to above-normal precipitation in September and October provided adequate to abundant moisture for crop emergence and establishment, and mild autumn weather conditions promoted later-than-usual growth. Crops entered dormancy during the second half of November, about 1 to 2 weeks later than usual. Unusually mild weather during the winter provided favorable overwintering conditions for crops. Winterkill totaled only 3 percent, the lowest level in 15 years. In March, the coldest weather since 1996 maintained snow cover 2 to 3 weeks later than usual, keeping winter wheat dormant. In April, a warming trend prompted greening in winter wheat about 2 weeks later than usual. In May, unseasonably warm, dry weather prevailed over the eastern half of the country, causing the winter wheat crop, which advanced through the highly weather sensitive heading stage of development, to rely on rapidly declining subsoil moisture reserves to sustain normal crop development. May's dryness in the region was followed by above-normal precipitation in early June, benefiting the crop in the grain-filling stage. Farther west, timely rains in May and early June favored winter wheat that advanced through the reproductive phase of development. In July, weather conditions favored rapid harvest activities. Overall, winter wheat production increased 8 percent from 2004, mainly due to the extremely low winterkill that resulted in a higher area, as well as similar yield prospects to those of the previous

year. Coarse grain production was down 21 percent from 2004 levels. Production for both spring barley and corn production declined 19 percent. For spring barley, wet weather at planting and early growth stages resulted in shallow root systems. Hot, dry weather in May negatively impacted the shallow-rooted crop. Despite favorable weather conditions for corn, production declines were caused by a 28 percent reduction in planted area from the previous year.

In Kazakhstan, spring grains (mostly spring wheat and spring barley) account for most of the total grain production. Spring barley typically accounts for about 80 percent of Kazakhstan's coarse grain production. Furthermore, most of the wheat grown in the country is of a spring variety. Periods of dry weather helped spring grain planting in May, while above-normal precipitation in June favored crop emergence and growth. Major grain producing areas in the north-central portion of the country received near- to above-normal precipitation in July, boosting yield prospects. As a result, wheat production in 2005 increased 11 percent from 2004. Coarse grain production remained at last year's levels, mainly due to less area planted to barley.

In Turkey, winter wheat and barley production decreased 3 percent. In Iran, favorable growing season weather and a continued expansion in area boosted wheat production 4 percent, resulting in another year of record wheat production.

In northwestern Africa, a southward extension of the drought that gripped the Iberian Peninsula resulted in periods of untimely dryness. Consequently, significant reductions were seen in both wheat and barley production. In Morocco, hardest hit by the drought, wheat production decreased 45 percent from 2004. Wheat yields in Morocco were down 43 percent from 2004. In Algeria, wheat and barley production declined by 42 and 70 percent, respectively. The decline in Algerian wheat production resulted from a 30 percent decrease in planted area and an 18 percent decline in yield.

In China, wheat production increased 6 percent due to favorable weather and increased area. Corn production increased by 3 percent in 2005, mainly due to a 3 percent increase in planted area.

In India, a small decrease in area was offset by a minor increase in yield, resulting in similar winter wheat production. In Pakistan, an increase in yields and area coupled with generally favorable weather resulted in an 11 percent increase in wheat production. Indian coarse grain production fell about 2 percent in 2005, as a late-arriving monsoon coupled with untimely dryness in August caused yields to drop by 3 percent.

In the Southern Hemisphere, Australian wheat production increased 6 percent in 2005. In Western Australia, warm, showery weather during the autumn aided winter wheat planting and establishment. A period of dryness during the winter slowed growth, but near-normal rainfall and generally seasonable temperatures the remainder of the growing season provided nearly ideal weather for reproductive to filling winter wheat. In southeastern Australia, very dry weather during the autumn caused extensive planting delays, raising concerns that drought would significantly reduce winter wheat production in this region. Soaking rain overspread southeastern Australia in mid-June and persisted throughout the growing season, however, greatly improving winter wheat prospects. In northern New South Wales and southern Queensland, warm, wet weather in the autumn helped early winter wheat development, but below-normal precipitation during the winter and spring and hot weather late in the growing season were likely responsible for some declines in yield potential.

In South Africa, wheat production rose about 7 percent due to improved yields and favorable harvest weather in key production areas of Western Cape and Free State. South African corn production was up 21 percent as the highest yields in recent memory more than offset marginal declines in acreage. In Argentina, 2005 corn

production was about 30 percent higher than the previous year's drought reduced crop, mainly due to timely showers in major production areas of Cordoba, Santa Fe, and Buenos Aires. In contrast, winter wheat production was down 24 percent due to a combination of problems, including drought, a late spring freeze, and untimely harvest rains in the main growing areas of central Argentina. In Brazil, winter wheat production fell about 20 percent, due to unusual wetness during harvest in Parana. Corn production fell more than 15 percent from 2004, as a second year of summer drought impacted both the main-season and winter corn crop.

Oilseed Summary: World oilseed production rose 2 percent in 2005. Oilseed production increased in the United States, Canada, Russia, Ukraine, India, Indonesia, Brazil and Argentina, and declined in the European Union, and China.

In North America, United States soybean production was the second highest on record, down 1 percent from 2004. Weather conditions were extremely favorable across northern growing areas, while drought reduced soybean yield potential from Texas northeastward to Illinois. In Canada, rapeseed (canola) production was up 25 percent from 2004, due to an increase in both area and yields boosted by a second season of long-term drought relief. Soybean production rose slightly due to increased yield and similar acreage levels to 2004 in Ontario.

In the European Union, oilseed production in 2005 was down 2 percent from 2004, due to drier than normal weather. In particular, Spain's oilseed crop suffered substantially from the effects of drought, with a 41 percent decrease in production. EU-25 rapeseed production increased 1 percent, reflecting production gains in France and the United Kingdom (11 and 21 percent, respectively) offset by decreases in production across the remainder of Europe. Sunflowerseed production declined in many countries due to reduced area and unfavorable weather, with Spain (49 percent reduction) experiencing the largest decline.

In Russia and Ukraine, sunflower production rose 35 percent and 54 percent, respectively in 2005. Growing season weather conditions were favorable for sunflowers, boosting yields above the previous year. In addition, are planted to sunflowers increased in both Russia and Ukraine.

In China, below-normal rainfall and lower yields reduced 2005 winter rapeseed production by over 13 percent. Additionally, soybean production was down about 2 percent due in part to flooding and lower yields in key growing areas of Manchuria.

In India, total oilseed production increased slightly (2 percent) in 2005. Winter rapeseed production was up 5 percent from last year, primarily due to a 4 percent increase in area. For the second consecutive year, summer oilseed production was mixed. Soybean production (up 9 percent) was not adversely affected by the erratic start to the 2005 monsoon season, due in part to higher acreage (6 percent increase). Peanut (groundnut) production was down 3 percent, mainly due to flooding in key groundnut areas of Gujarat and southern India. In Gujarat, India's second largest groundnut producing state, excessive monsoon rainfall flooded fields, increasing disease concerns and reducing yield potential. Farther south, India's rabi (winter) groundnut crop was adversely impacted by unseasonably heavy rainfall during the flowering stage in October.

In Argentina, soybean production rose almost 20 percent in 2005. Nearly ideal growing conditions benefited flowering and pod filling soybeans during January and February in the main growing areas. Similarly, sunflower production increased about 10 percent due to increased yield on marginally higher acreage. In southern Brazil, soybean farmers experienced a second year of drought (see Figure 3) and yields were slightly lower than those recorded in 2004. However, production was about 4 percent higher due to a sixth consecutive year of record planted area and less problems with Asian Rust in northern growing areas compared with the previous year.

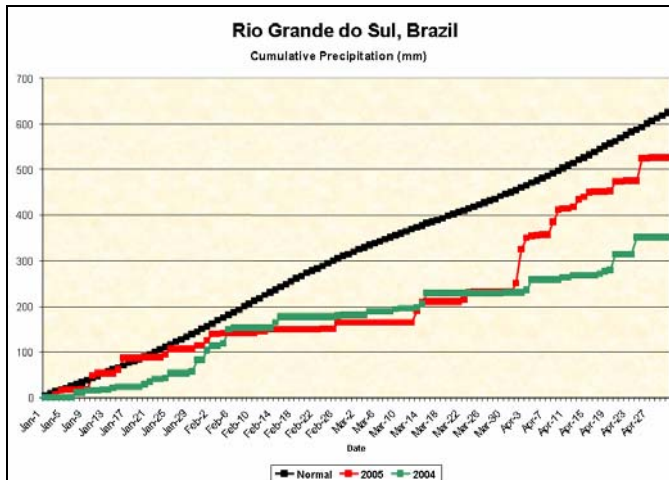


Figure 3. Cumulative precipitation for Rio Grande Do Sul, Brazil.

Rice Summary: World rice production rose 2 percent in 2005. Rice production increased slightly throughout most of Southeast Asia and India.

In India, rice production increased 2 percent. Production increased 3 percent in Bangladesh, which was spared from flooding for much of the season. Pakistan recorded an increase of about 10 percent due to higher yields (also up 9 percent). In Thailand, production rose by nearly 5 percent due to a more normal monsoon season as compared with the previous year. In Vietnam, rice production in 2005 remained virtually unchanged from the previous year. In China, 2005 rice production rose slightly, due primarily to an increase in area.

Cotton Summary: World cotton production declined by 5 percent in 2005. Cotton production increased in the United States, Uzbekistan, and Argentina, and declined in China, India, Pakistan, Turkey, and Brazil.

In the Northern Hemisphere, United States cotton production was up 2 percent from 2004 and reached a record high for the second consecutive year. Most of the U.S. cotton belt experienced favorable growing and harvest conditions, although the remnants of Hurricanes Katrina (late August) and Rita (late September) produced heavy rain and gusty winds in the lower Mississippi Valley. In

Uzbekistan, favorable weather conditions during the growing season and fall harvest period resulted in an 8 percent increase in cotton production. In China, production decreased by 10 percent. Despite favorable growing conditions in Xinjiang, wet weather on the North China Plain, while bolls were open, reduced yields. Turkish production decreased by nearly 15 percent due to unfavorably wet weather during the cotton harvest. In India, cotton production decreased 2 percent due in part to heavy late-season rain in northern India, which fell as cotton reached the open-boll stage of development. Production in Pakistan also dropped (14 percent) in response to unseasonably heavy rains in September.

In the Southern Hemisphere, Australian cotton production surged approximately 76 percent in 2005 in response to improved soil moisture and reservoir levels. Near-normal rainfall during 2004 helped break the devastating drought that enveloped northern New South Wales and southern Queensland during 2002 and 2003, boosting moisture supplies for dryland and irrigated crops. In Argentina, production jumped 31 percent as increased area offset a decline in yield. In Brazil, production fell slightly as drought-reduced yields were partially offset by a 6 percent increase in area.